SOCIOECONOMIC PROFILE - RAWLINS

The Rawlins field office encompasses a large area across much of southern Wyoming and is located within four counties: Albany, Carbon, Laramie and Sweetwater. Activities in the planning area have the potential to affect all of these counties. Therefore the economic study area will include the four counties and will be the focus of this section.

Demographic and economic data for the study area has been collected from a variety of sources and covers the last twenty years. In most cases, a ten-year time horizon was used to examine recent trends in demographic and economic parameters for the study area and is discussed in detail below.

1.0 County Characteristics

Like much of Wyoming, the counties within the economic study area are quite rural in nature. All four counties encompass a rather large land area with a dispersed population as summarized in Table 1-1. The exception is Laramie County which as a higher population density due largely to the location of Cheyenne within its border. The number of persons per square mile range from 2.0 in Sublette County to 30.4 in Laramie County.

Table 1-1
Geographic Characteristics of Study Area

Geographic Characteristic	Albany	Carbon	Laramie	Sweetwater	Wyoming	U.S.
Land Area (Million Acres)	2.7	5.1	1.7	6.7	62.1	2,200
Land Area (Sq. Miles)	4,273	7,896	2,686	10,425	97,100	3.5 Million
Persons Per Square Mile	7.5	2.0	30.4	3.6	5.1	79.6

The largest population centers in the study area are listed in Table 1-2. These areas are reporting changes in population over the last decade that vary by location. Population is increasing in the eastern portions of the Rawlins Field Office while declining in western areas.

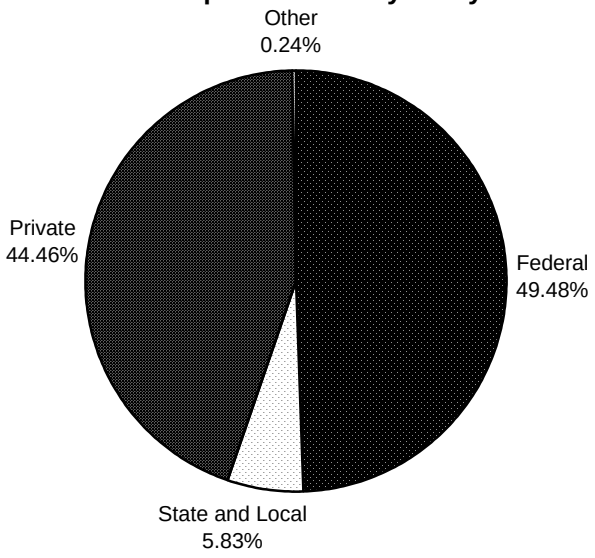
Table 1-2
Population Centers

County	City	Population		
		1990	2000	% Change
Albany	Laramie	26,687	27,204	1.9
Carbon	Rawlins	9,380	8,538	-9.0
	Saratoga	1,969	1,726	-12
Laramie	Cheyenne	50,008	53,011	6
	Pine Bluffs	1,054	1,153	9.4
Sweetwater	Green River	12,711	11,808	-7.1
	Rock Springs	19,050	18,708	-1.8

Land ownership in the economic study area is summarized in Figure 1-1. Public lands account for a significant proportion of the land base with 49 percent of total land area being owned and managed by federal agencies including the BLM. To illustrate, the Rawlins Field Office comprises approximately 3.5 million surface acres, which is 22 percent of the economic study area. In addition, the field office is responsible for 4.67 million acres of BLM-administered federal mineral estate.

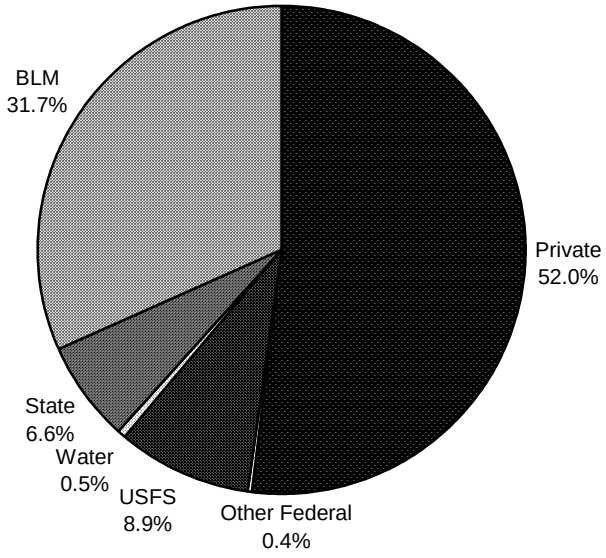
The Rawlins Field Office is known for the checkerboard pattern of land ownership within a large portion of its field office boundaries. Figure 1-2 summarizes the land ownership within the field office boundaries and shows that the BLM manages 32 percent of the total land area while 52 percent is held in private ownership. However, even though the BLM manages almost a third of the surface acres, the unique land ownership pattern in this field office presents resource management challenges.

Figure 1-1
Land Ownership - Four County Study Area



Source:
Wyoming Division of Economic Analysis

Figure 1-2
Land Ownership - Rawlins Field Office



2.0 Demographic Characteristics

2.1 Population

Annual population estimates for each of the four counties in the economic study area for 1980-2000 are plotted in Figure 2-1. Population increased by 19 percent over the twenty years in this area equating to an annual average increase of less than one percent. While total population in the economic study area grew modestly over the last twenty years, examination of the components of population growth reveals some additional insights. In Table 2-1, the components of population change show that increases in population in this area are due to natural changes (more births than deaths) while net migration is continuing to draw individuals away from this area. Overall, the study area followed a statewide trend of declining population due to net migration. All counties experienced decreases in population due to net migration during both decades, with population declining by nearly 14 percent during the 1980s and over 5 percent during the 1990s. The trend indicates that more individuals continue to leave than are moving into the area in spite of the increases in total population during the last two decades.

Figure 2-1
Population Estimates for Counties in Rawlins Field Office
1980 - 2000

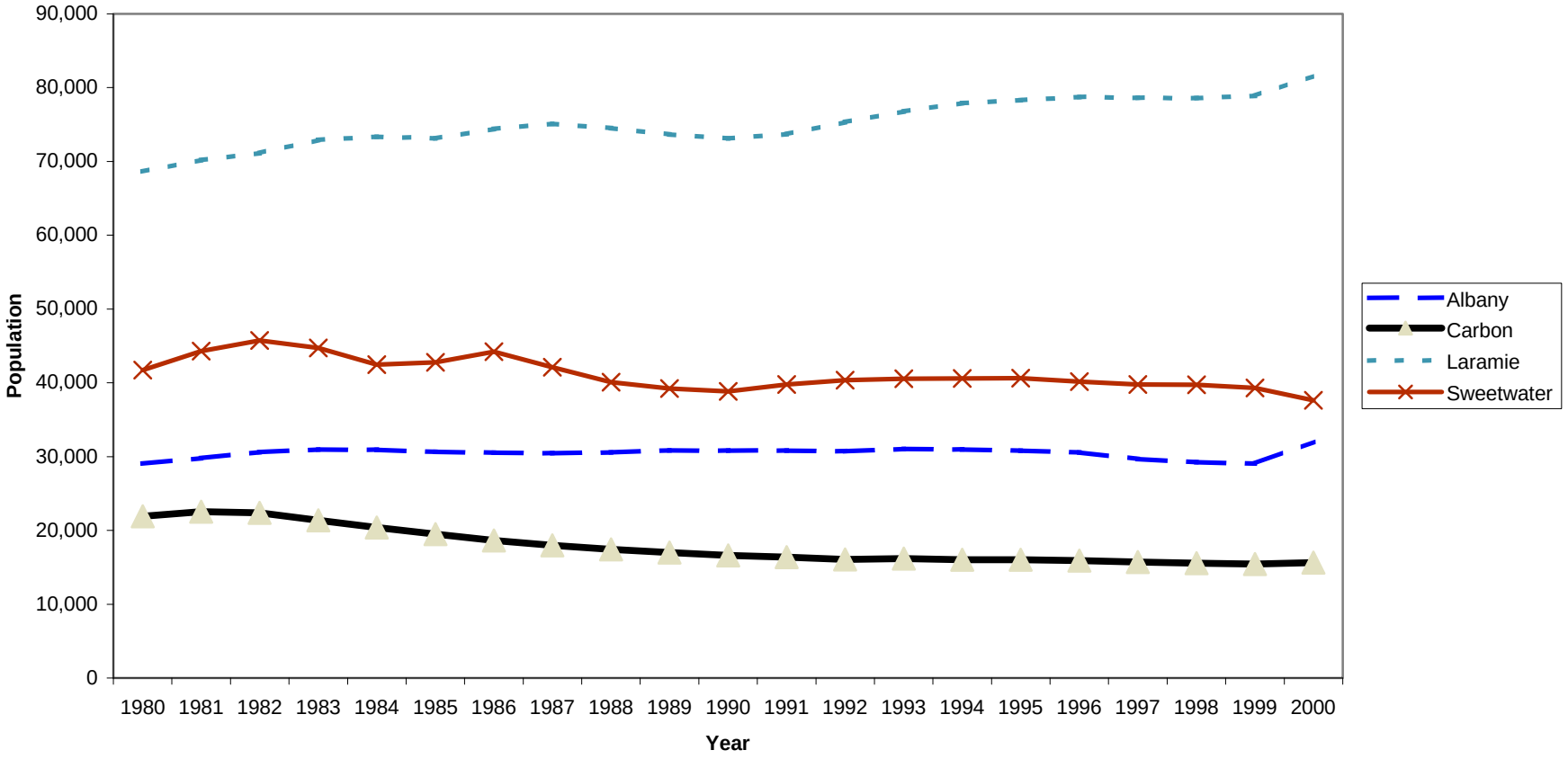


TABLE 2– 1

COMPONENTS OF POPULATION CHANGE 1980 – 1999 COUNTIES IN STUDY AREA

1990 – 1999

County	1990 Population	1999 Population	Numeric Change in Population 1990-1999	Percentage Change in Total Population 1990-1999	Cumulative Births	Cumulative Deaths	Natural Change in Population	Natural Percentage Change in Population	Net Migration	Percentage Change in Population Due to Net Migration
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Albany, WY	30,797	29,060	-1,737	-5.64%	3,596	1,487	2,109	6.8%	-3,846	-12.49%
Carbon, WY	16,602	15,437	-1,165	-7.02%	1,715	1,205	510	3.1%	-1,675	-10.09%
Laramie, WY	73,142	78,877	5,735	7.84%	11,110	5,330	5,780	7.9%	-45	-0.06%
Sweetwater, WY	38,823	39,322	499	1.29%	5,245	2,085	3,160	8.1%	-2,661	-6.85%
Study Area	159,364	162,696	3,332	2.09%	21,666	10,107	11,559	7.3%	-8,227	-5.16%
Wyoming	469,557	453,589	-15,968	-3.40%	91,165	32,059	59,106	6.00%	-1,382	-0.30%

1980-1990

County	1980 Population	1990 Population	Numeric Change in Population 1980-1990	Percentage Change in Total Population 1980-1990	Cumulative Births	Cumulative Deaths	Natural Change in Population	Natural Percentage Change in Population	Net Migration	Percentage Change in Population Due to Net Migration
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Albany, WY	29,062	30,797	1,735	5.97%	4,664	1,526	3,138	10.80%	-1,403	-4.83%
Carbon, WY	21,896	16,659	-5,237	-23.92%	3,589	1,406	2,183	9.97%	-7,420	-33.89%
Laramie, WY	68,649	73,142	4,493	6.54%	13,342	5,064	8,278	12.06%	-3,785	-5.51%
Sweetwater, WY	41,723	38,823	-2,900	-6.95%	8,823	2,022	6,801	16.30%	-9,701	-23.25%
Study Area	161,330	159,421	-1,909	-1.18%	8,253	2,932	5,321	3.30%	-22,309	-13.83%
Wyoming	453,589	479,602	26,013	5.70%	60,099	32,704	27,395	12.60%	-1,382	-16.00%

Sources:

U.S. Census Bureau

2.2 Poverty Rates

The U.S. Census Bureau estimates poverty levels using a set of money income thresholds that vary by family size and composition. If a household's income is below the money threshold, then the family and all the individuals of that household are considered poor. Using this criterion, the Census Bureau provides estimates of the percentage of individuals that fall below the poverty level for each county in the U.S. Poverty estimates are also provided for different regions of the U.S. as well as the U.S. as a whole.

Table 2-2 summarizes the estimated poverty rates for the four counties in the economic study area, Wyoming, the West and the U.S. Carbon, Laramie and Sweetwater counties have experienced estimated poverty levels over the last decade below the state, regional and national averages. The exception is Albany County which has estimated poverty levels that area higher than all other areas.

Table 2-2
Estimated Poverty Rates

Location	1989	1998
Albany, Co.	19.8%	14%
Carbon, Co.	10.0%	11.8%
Laramie, Co.	10.6%	10.7%
Sweetwater, Co.	8.0%	8.1%
Wyoming	11.9%	11.4%
West	12.5%	14.6%
U.S.	12.8%	13.3%

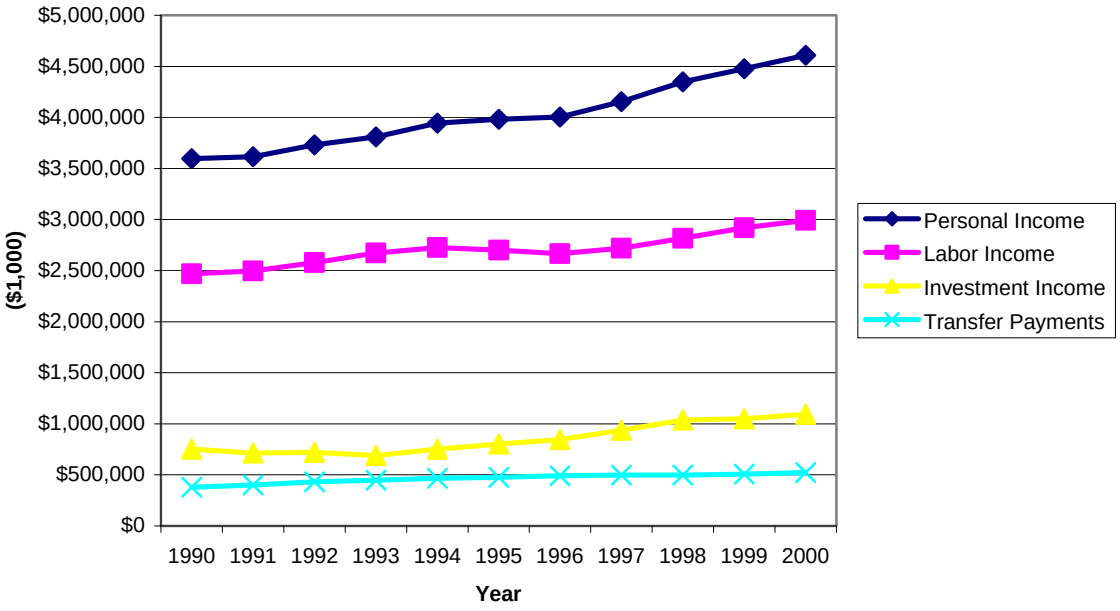
Source: U.S. Census Bureau, State Model Estimates of the Percentage of Persons of All Ages in Poverty

2.3 PERSONAL INCOME TRENDS

Personal income data was obtained for each county in the economic study area from the U.S. Bureau of Economic Analysis. Figure 2-2 summarizes components of personal income for 1990 through 2000 for the combined economic study area in inflation-adjusted dollars (2001$). Total personal income increased by over $1 billion during the 1990's representing a 28 percent increase.

Personal income can be broken down into three categories: labor income, investment income and transfer payments. Labor income is derived through wages, salaries and self-employment income. Investment income includes income in the form of rents, dividends and interest earnings. Finally, transfer payments is largely derived from Social Security benefits, Medicare and Medicaid benefits and other income support and assistance.

Figure 2-2
Personal Income Trends 1990-2000 (2001$)



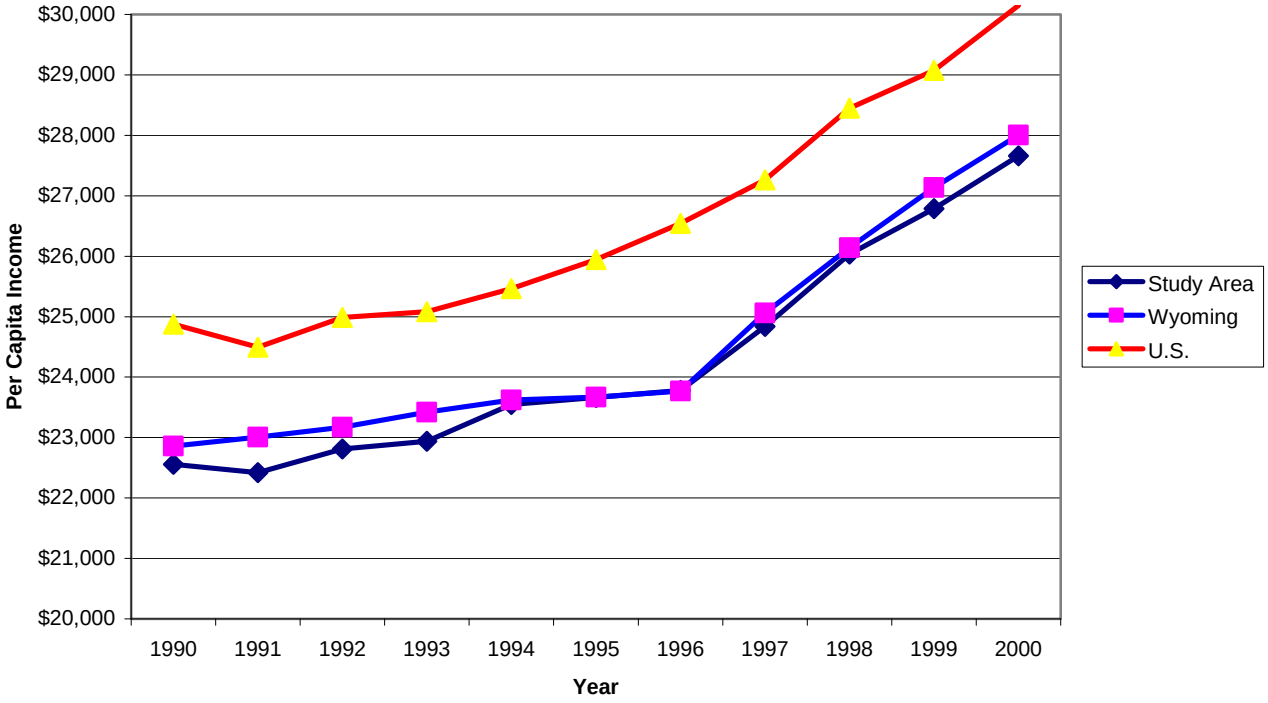
Labor income consistently accounts for the greatest percentage of personal income for this area (65 percent in 2000). However, the importance of income from non-labor sources has increased during the 1990s accounting for 35 percent of total personal income in 2000, up from 31 percent in 1990. This change in how individuals earn income is not unlike national or state trends.

Investment income in the study area grew by 45 percent during the 1990s and accounted for 24 percent of personal income by 2000. Investment income as a percentage of personal income for this area in 2000 was higher than the national average (18 percent) but below the state average (26 percent). The increasing dependence on investment income is common throughout the country with the increasing percentage of the population that is retired.

Transfer payments for the study area grew by 38 percent during the 1990s and accounted for 11 percent of total personal income in the economic study area in 2000. While this area has experienced a slight increase in dependence on transfer payments as a source of income, it is very similar to state and national trends where transfer payments accounted for 12 percent of personal income for residents of Wyoming in 2000 and 13 percent nationally.

Trends in per capita income for the study area, the state and the nation are summarized in Figure 2-3. Growth in per capita income is very similar in the three areas averaging between 21 and 23 percent. However, this area has traditionally reported per capita income levels below the national average. For example, in 2000 per capita income for the study area was $27,660, which was lower than both the state ($28,004) and national ($30,150) averages.

Figure 2-3
Per Capita Income Trend 1990-2000 (2001$)



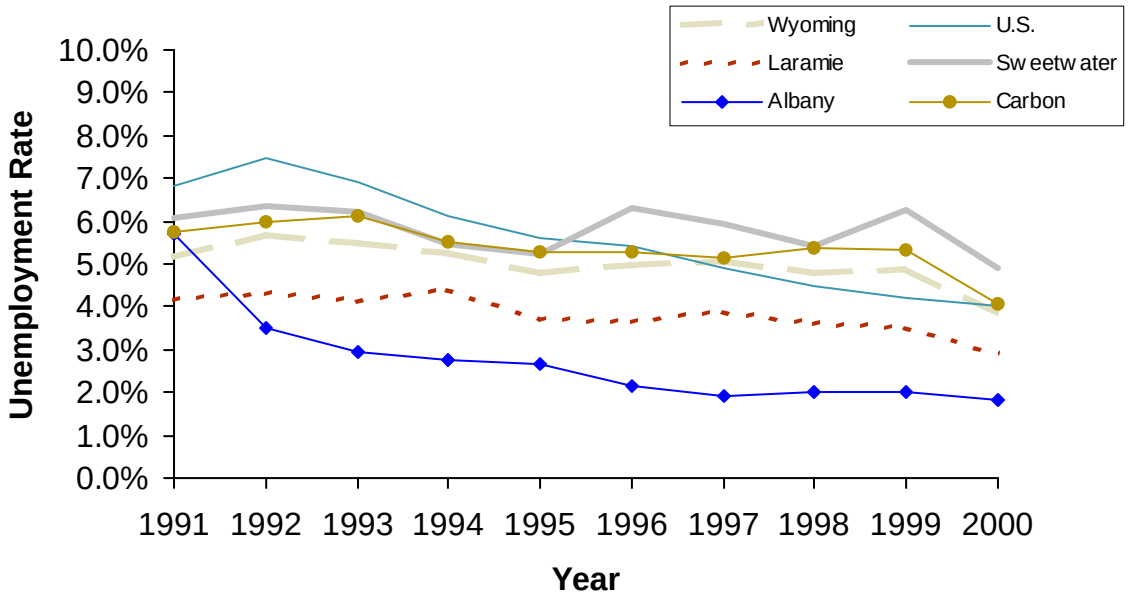
3.0 ECONOMIC CHARACTERISTICS

This section focuses on trends associated with certain economic characteristics in the study area. This includes changes in the labor force and unemployment and also trends in earnings by industry.

3.1 LABOR FORCE AND UNEMPLOYMENT

Change in the labor force and unemployment can provide information on the health of the local economy. The average annual unemployment rates for each of the counties, Wyoming, and the U.S. are summarized in Figure 3-1. This Figure clearly illustrates unemployment in the Carbon and Sweetwater counties has consistently been higher than unemployment for the state of Wyoming during the 1990s and higher than the national average since 1997. However, this same graph also indicates unemployment in Albany and Laramie counties has been below the state and national averages for almost the entire ten-year period. The significant difference in the unemployment rates between the eastern and western half of the economic study area likely reflects the availability of jobs in the larger cities of Laramie and Cheyenne in the east in comparison to western portions of the study area.

FIGURE 3 - 1
UNEMPLOYMENT RATE, ECONOMIC STUDY AREA
1991 – 2000



Changes in the civilian labor force during the 1990's are summarized for each county and Wyoming in Table 3-1. The civilian labor force is defined as all persons over 16-years of age in the civilian non-institutional population who either had a job or was looking for a job in the last 12 months. Overall, the study area realized slower growth in the civilian labor force than for the state. In addition, the eastern portion of the economic study area realized growth in the labor force while western counties experienced a decline.

TABLE 3 – 1
CHANGE IN CIVILIAN LABOR FORCE 1991-2000

Location	Change in Civilian Labor Force Between 1991-2000	Percentage Change in Civilian Labor Force Between 1991-2000
Albany County, WY	2,516	15.6
Carbon County, WY	-278	-3.2%
Laramie County, WY	5,396	15%
Sweetwater County, WY	-550	-2.71%
Economic Study Area	7,084	8.7%
Wyoming	32,810	14.0%

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics

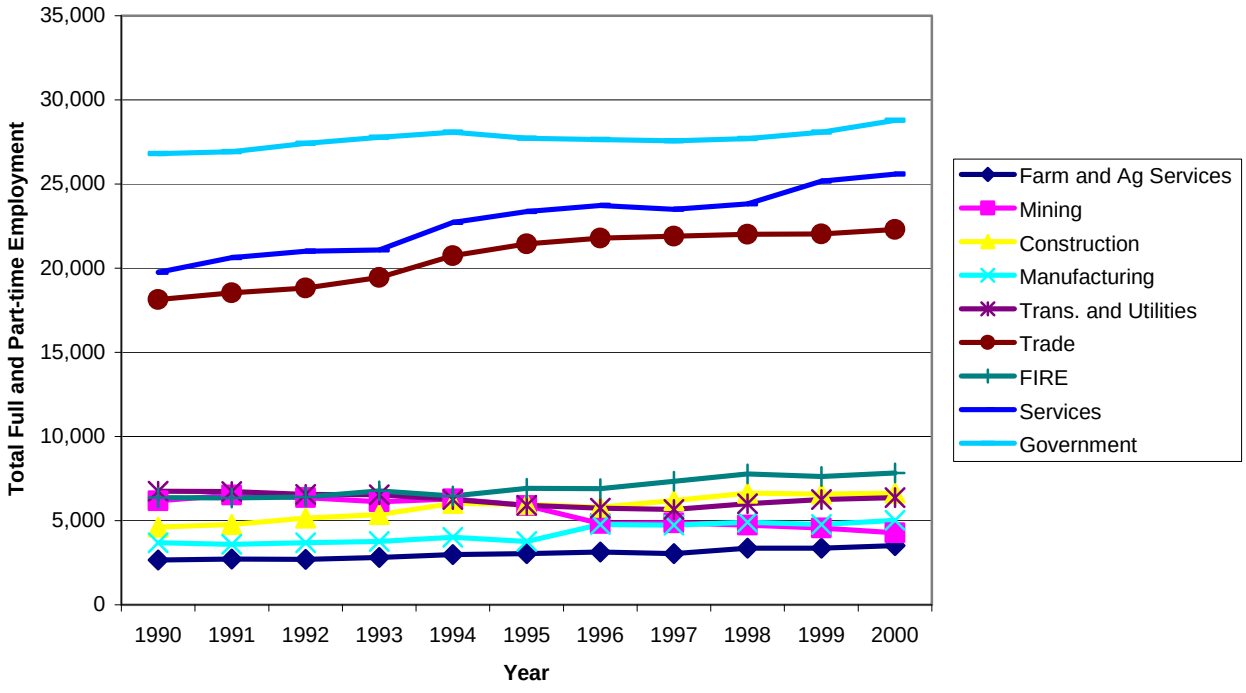
3.2 EMPLOYMENT AND EARNINGS BY INDUSTRY

The U.S. Bureau of Economic Analysis (BEA) estimates annual employment and earnings for counties throughout the U.S. Total annual employment includes both full-time and part-time jobs so individuals with more than one job will be counted twice. The employment estimates include those that are employed by businesses and public entities as well as individuals that are self-employed. Data was obtained from BEA regarding total annual employment for each of the counties in the economic study area, Wyoming and the U.S. for 1990 through 2000 in order to examine trends in employment by industry over the ten-year study period.

Total employment in the economic study area increased by 16 percent during the 1990s from 94,980 in 1990 to 110,212 in 2000. Compared with employment growth in Wyoming and nationwide this area showed slower growth in employment. For instance, over the same ten-year period total employment grew by 21 percent in Wyoming and 20 percent nationwide.

Employment trends in the four county study area by industry for 1990 through 2000 are summarized in Figure 3-2. The largest employers in the region include government services and trade and comprised 70 percent of total employment in 2000.

Figure 3-2
Employment Trends 1990-2000



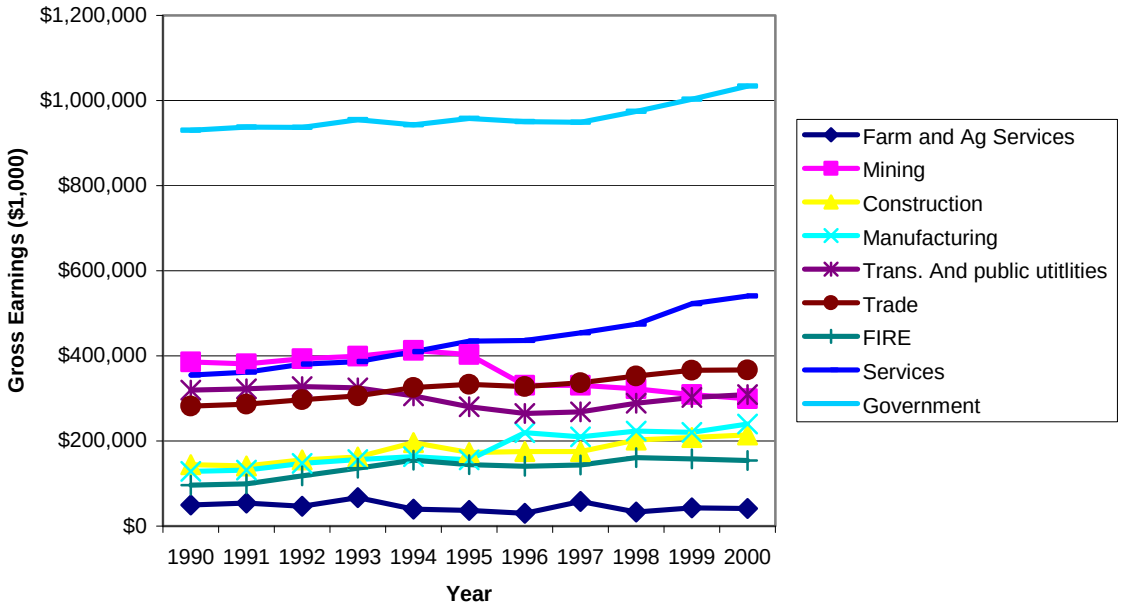
The dominance of government employment is due to the large number of state employees located in Cheyenne and Laramie due to state government and the University of Wyoming. Industries showing the greatest percentage increase in employment during this period

include construction (43 percent), manufacturing (36 percent), and farm and agricultural services (32 percent). Industries showing the greatest percentage decline in employment between 1990 and 2000 were mining (-36 percent) and transportation and utilities (-6 percent).

Total Earnings by industry for counties in the study area, Wyoming and the U.S. for 1990 through 2000 were also obtained from BEA. A summary for the study area is provided in Figure 3-3. Total gross earnings for all industries (private non-farm, farm and government) increased by 19 percent between 1979 and 1999. Nonetheless, the growth in earnings for this area fell behind the state and national growth rates where earnings increased by over by 25 percent and 39 percent, respectively.

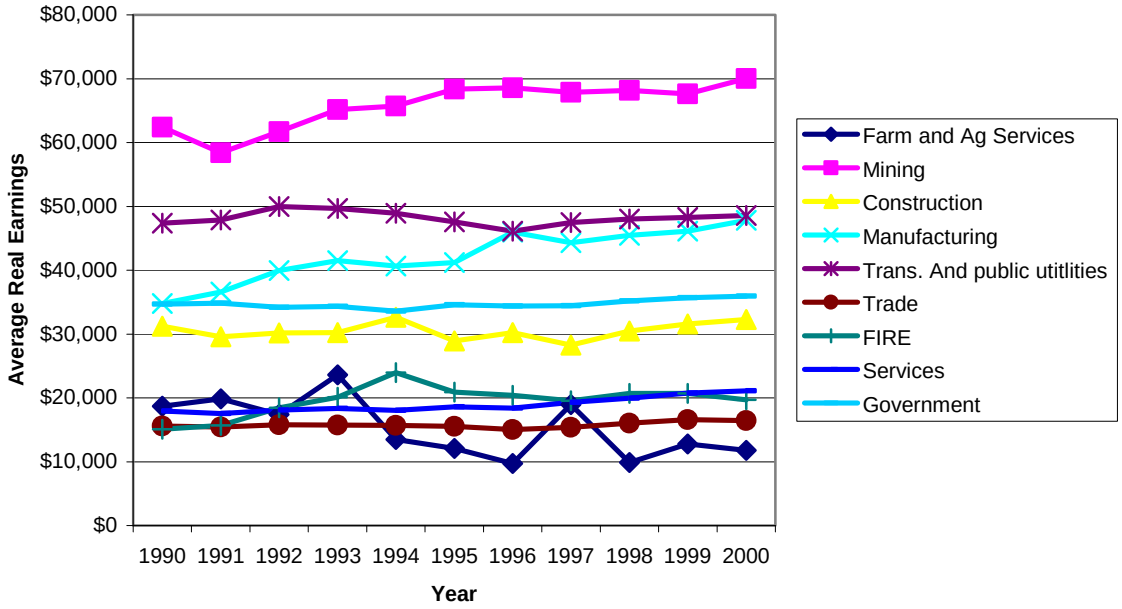
Figure 3-3 provides a summary of earnings trends by industry for the study area for 1990 through 2000. Earnings from the government sector dominate this area providing the largest percentage of earnings of any industry consistently accounting for nearly a third of total earnings on an annual basis during the 1990s. The service sector now accounts for the second highest percentage of total earnings in the economic study area (17 percent) this is followed by trade (11 percent) and transportation and utilities (10 percent). Industries reporting the greatest growth in earnings include manufacturing, finance, real estate and insurance and services. Declines in earnings occurred in the mining, farm and agricultural services and transportation and utilities sectors.

Figure 3-3
Gross Earnings by Industry 1990-2000 (2001$)



Another method of examining the importance of certain industries is to examine the trends in average earnings. Figure 3-4 shows the trends in average earnings for the study area for 1990-2000. This graph shows that mining jobs remain the highest paying in the area followed by transportation and manufacturing.

Figure 3-4
Average Real Earnings by Industry 1990-2000 (2001$)



Industries showing the greatest percentage increase in earnings include manufacturing (37 percent), finance, real estate and insurance (31 percent) and services (18 percent). While the government sector supports the greatest percentage of jobs and earnings in the study area, growth in real earnings have been relatively modest during the 1990s, increasing by 4 percent between 1990 and 2000.

3.3 ECONOMIC BASE

An area's economic base is comprised of industries that are primarily responsible for bringing outside income into the local economy. These industries typically export their goods and services outside the region and in turn support ancillary industries such as retail trade, housing construction and personal services. The location of important industries in certain areas has traditionally been tied to such factors as natural resource base, cost factors (transportation and labor) and existing transportation infrastructure. However, technology has affected these location factors.

To assess the importance of major industries as a basic industry, location quotients were calculated on nine major industries as listed in Table 3-2. A location quotient was calculated for both employment and income and compares each industry's share of total local employment or income to the industry's state or national share. This quotient yields a value generally between 0 and 2, where 1.0 indicates an equal share percentage between the local and state or national economies. Location quotients greater than 2 indicate a strong industry concentration while those less than 0.50 indicate a weak concentration.

Table 3-2 indicates the four county study area in many ways mirrors the state's economy as a whole. Industries that do show a stronger concentration in this area compared to the state's economy include manufacturing, transportation and utilities and government. Two industries that are weak in this area compared with the state are mining and farm and agriculture services. However, when compared to the national economy, mining shows an extremely high concentration. This is true for the government sector as well. Alternatively, manufacturing, FIRE and services show weak concentration compared to the national economy.

TABLE 3 – 2
Location Quotients for Study Area – 2000

Industry	Employment		Earnings	
	Location Quotient (WY)	Location Quotient (U.S.)	Location Quotient (WY)	Location Quotient (U.S.)
Farm and Ag Services	0.54	1.01	0.67	0.87
Mining	0.63	8.16	0.63	11.03
Construction	0.75	1.05	0.79	1.12
Manufacturing	1.04	0.40	1.42	0.48
Trans. and Utilities	1.05	1.17	1.12	1.42
Trade	0.94	0.97	0.90	0.77
FIRE	0.96	0.88	0.96	0.51
Services	0.87	0.73	0.86	0.58
Government	1.28	1.92	1.38	2.08

4.0 Property Valuation and Taxation

Total property valuation for the four counties in the economic study area for 2001 is summarized in Table 4-1. This includes property assessed by the State of Wyoming and locally assessed property. The State of Wyoming assesses taxes on both mineral and non-mineral property. Non-mineral property assessed by the state includes airlines, utilities, pipelines and gas distribution systems, railroads, and phone service.[1] During fiscal year 2001, the valuation of property assessed by the state was $1.6 billion for the economic study area. Local government also assesses four categories of property including agricultural land, residential and commercial land, improvements and personal property and industrial property. During fiscal year 2001, the value of property assessed by local governments in the study area exceeded $946 million as summarized in Table 4 -1. Total value of assessed property in the four county study area was $2.6 billion in fiscal year 2001.

Mineral production in the economic study area is a major source of tax revenue for government entities within the study area. For instance, during fiscal year 2001, minerals accounted for nearly 80 percent of the value of property assessed in the area. In addition, oil and gas production and operations provide a significant percentage of the assessed value of minerals, especially in Carbon and Sweetwater counties.

[1] *Wyoming Department of Revenue Annual Report – Fiscal Year 2001, Cheyenne, Wyoming.*

Table 4-2 summarizes the assessed value of oil and gas production and property for fiscal year 2001 for each of the counties in the economic study area. For 2001, oil and gas production accounted for 75 percent of all mineral valuation in the study area as assessed by the state. For Carbon and Sweetwater counties, oil and gas production accounted for 92 and 68 percent of all assessed mineral production, respectively. Physical assets of the oil and gas industry (property) comprised an additional 2.7 percent of all property assessed by local governments. Of all property and production assessed by the state and local governments, oil and gas operations accounted for 42 percent of assessed value in the economic study area during fiscal year 2001. A breakdown of assessed values by property category is provided in Figures 4-1 and 4-2.

Figure 4-1
State Assessed Property

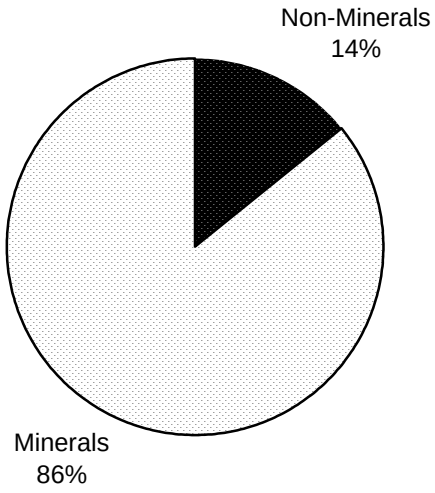


Figure 4-2
Local Asessed Property

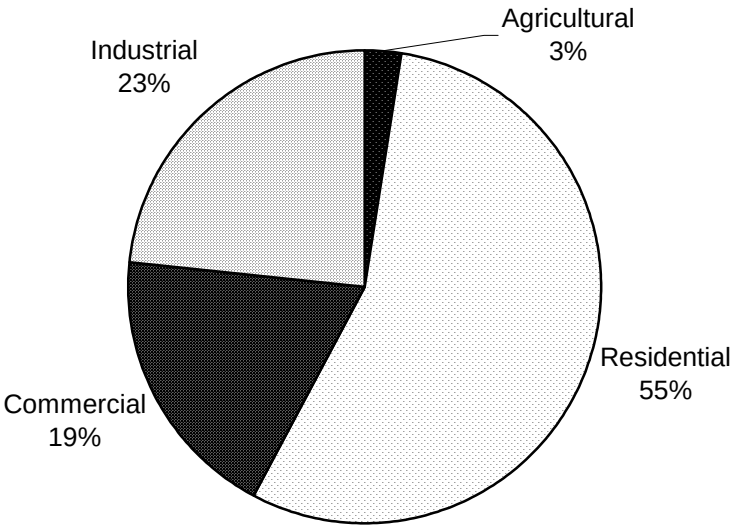


Table 4-1
Assessed Property Valuations by County for 2001

	Valuation of State- Assessed Property			Valuation of Locally Assessed Property					
County	**Non-Minerals**	**Minerals**	**Total State Assessed Property**	**Agricultural Land**	**Residential Land, Improvements and Personal Property**	**Commercial Land, Improvements and Personal Property**	**Industrial Property**	**Total Locally Assessed Property**	**Total State and Locally Assessed Property**
Albany	$23,792,281	$3,324,167	$27,116,448	$5,636,217	$107,891,145	$34,425,664	$6,475,411	$154,428,437	$181,544,885
Carbon	$41,628,203	$426,289,238	$467,917,441	$6,262,236	$37,701,960	$14,333,269	$27,848,535	$86,146,000	$554,063,441
Laramie	$44,719,001	$17,992,517	$62,711,518	$9,790,261	$265,897,775	$98,510,417	$28,210,102	$402,408,555	$465,120,073
Sweetwater	$122,849,306	$980,185,196	$1,103,034,502	$3,105,344	$110,041,844	$32,191,664	$158,602,935	$303,941,787	$1,406,976,289
Total – Study Area	$232,988,791	$1,427,791,118	$1,660,779,909	$24,794,058	$521,532,724	$179,461,014	$221,136,983	$946,924,779	$2,607,704,688

Table 4-2
Assessed Value of Oil and Gas Production and Property in Study Area for Fiscal Year 2001

County	Oil and Gas Valuation - Production	Oil and Gas Valuation as Percentage of Total Mineral Valuation	Oil and Gas Extraction and Refining Property Valuation	Oil and Gas Property as a Percentage of Total Property Valuation	Oil and Gas Valuation as Percentage of Total State and Local Assessed Property Valuation
Albany	$1,866,033	56.14%	$104,284	0.07%	1%
Carbon	$393,684,237	92.35%	$25,146,585	29.19%	76%
Laramie	$10,676,916	59.34%	$8,756,014	2.18%	4%
Sweetwater	$670,371,775	68.39%	$42,161,137	13.87%	51%
Total Study Area	**$1,076,598,961**	**75.40%**	**$25,250,869**	**2.67%**	**42%**

4.1 Ad Valorem Taxes – Counties

Estimated ad valorem taxes from mineral production for each county during fiscal year 2001 are summarized in Table 4-3. These counties generated $76 million in tax revenues from mineral production during fiscal year 2001. Of this $76 million, $67 million was derived from oil and gas production or 89 percent. Ad valorem taxes derived from mineral production accounted for 53 percent of total county tax levies in 2001.

Table 4-4 provides an estimate of the ad valorem taxes assessed on property associated with oil and gas and coal operations. During fiscal year 2001, the four counties generated an estimated $3.9 million in property taxes associated with oil and gas and coal extraction assets.

Table 4.3
Estimated Mineral Ad Valorem Tax Revenues - Fiscal Year 2001

County	Natural Gas	Crude Oil	Coal	Trona	Granite Ballast	Sand and Gravel	Total	Property Tax Levy[a]	Mineral Tax Levy as Percentage of County Tax Levy
Albany	$0	$117,446	$0	$0	$0	$5,094	$122,541	$12,481,661	1%
Carbon	$22,455,265	$1,927,568	$2,001,986	$0	$0	$17,404	$26,402,224	$34,927,573	76%
Laramie	$21,974	$710,730	$0	$0	$438,322	$58,908	$1,229,933	$34,322,378	4%
Sweetwater	$35,541,587	$6,989,927	$6,544,036	$13,083,494	$0	$28,479	$62,187,523	$89,145,656	70%
Total Study Area	$58,018,826	$9,745,670	$8,546,023	$13,083,494	$438,322	$109,886	$89,942,220	$170,877,268	53%

Table 4.4
Estimated Ad Valorem Tax Revenues on Oil and Gas and Coal Property - FY 2001

County	Oil and Gas Property Assessment	Coal Property Assessment	Average Tax Levy	Total Estimated Ad Valorem - Property
Albany	$104,284	$0	62.94	$6,564
Carbon	$13,557,345	$1,459,743	61.94	$930,158
Laramie	$813,889	$0	68.63	$55,857
Sweetwater	$42,161,137	$3,944,703	63.44	$2,924,954
Total Study Area	**$56,636,655**	**$5,404,446**	**124.88**	**$3,917,534**

Table 4.5 estimates the importance of oil and gas operations in terms of local government property tax revenues. The two counties in the study area generated $71 million in tax revenues due to oil and gas operations. This accounted for 42 percent of property taxes generated in this area for Fiscal Year 2001.

Table 4.5
Oil and Gas Tax Revenues as Percentage of Total County Property Taxes - Fiscal Year 2001

County	Total Ad Valorem Tax Revenue - Oil and Gas	Property Tax Levy[a]	Oil and Gas Tax Revenue as Percentage of County Tax Levy
Albany	$124,010	$12,481,661	1%
Carbon	$25,222,507	$34,927,573	72%
Laramie	$788,556	$34,322,378	2%
Sweetwater	$45,206,413	$89,145,656	51%
Total Study Area	$71,341,487	$170,877,268	42%

[a] Wyoming Taxpayers Association, *Wyoming Property Taxation, 2001*.

4.2 Mineral Severance Taxes – State of Wyoming

Local government entities also benefit from severance taxes collected on mineral production throughout the state. Table 4-1 shows that $1.4 billion was assessed by the state of Wyoming for mineral production in the four county study area. However, severance taxes collected on mineral production are distributed within the state according to a formula published in the state statutes.[2] Severance tax revenues are distributed to a variety of sources including the state general fund, water development account, state highway fund, counties, cities and towns. Therefore, the government entities within the study area will only benefit from a percentage of severance taxes collected on production within the economic study area. However, these entities will also benefit from severance taxes collected on mineral production occurring in other parts of the state as well. Table

[2] *W.S. 39-14-801.*

4-6 summarizes the total severance tax revenues that were distributed to the local government entities within the study area during fiscal year 2001.

Table 4-6
Total Severance Tax Distributions for Government Entities in the Study Area, FY 2001

Area	Severance Tax Distributions
Counties in Study Area	$4,801,380
Total Severance Taxes Distributed to All Counties in WY	$13,843,706
Percentage Distributed to Study Area Counties	35%
Cities and Towns in Study Area	$13,638,594
Total Severance Taxes Distributed to All Cities/ Towns in WY	$35,370,306
Percentage Distributed to Study Area Cities/Towns	39%

Source: Annual Report of the Treasurer of the State of Wyoming, June 30, 2001.

Table 4-7 estimates the severance taxes generated from mineral production originating within the economic study area. The estimated severance taxes for each mineral type are based on production and assessed values and the effective tax rates, which were all obtained from the Wyoming Department of Revenue, Mineral Tax Division. Natural gas production generated the most severance tax revenue in the economic study area, accounting for nearly 67 percent of all severance taxes generated with the majority of production occurring in Carbon and Sweetwater counties.

Table 4-7
Severance Taxes Generated by Product

County	Natural Gas	Crude Oil	Stripper Oil	Coal - Surface	Coal - Underground	Granite Ballast	Trona	Sand and Gravel	Total	Percentage of Total Severance Taxes Generated in Each County
Albany	$0	$77,664	$20,140	$0	$0	$0	$0	$1,619	$99,423	0.1%
Carbon	$21,028,585	$1,566,690	$145,466	$623,286	$878,246	$0	$0	$5,620	$24,247,893	30.6%
Laramie	$18,572	$462,391	$89,784	$0	$0	$127,744	$0	$17,168	$715,658	0.9%
Sweetwater	$32,491,495	$6,233,244	$32,737	$7,220,190	$0	$0	$8,248,759	$8,978	$54,235,402	68.4%
Total - Study Area	$53,538,651	$8,339,989	$288,127	$7,843,476	$878,246	$127,744	$8,248,759	$33,385	$79,298,377	100.0%
Percentage of Severance Taxes Generated from Each Product	67.5%	10.5%	0.4%	9.9%	1.1%	0.2%	10.4%	0.04%	100.0%	0.0%

4.3 Federal Royalties

Mineral production occurring on federally owned public lands are also assessed a federal mineral royalty. Production is assessed at 12.5 percent of value after allowable deductions. The federal government then returns fifty percent of the total royalties collected to the state where the mineral production occurs.

In Wyoming, the distribution of the federal royalties is based on a formula promulgated by the Wyoming State Statutes.[3] The state allows a percentage of the federal royalties to be distributed to cities and towns for planning, construction and maintenance of public facilities, capital construction funds and transportation projects. In addition, local school districts may benefit from federal royalty payments through advanced entitlement grants for capital construction funds.

Total federal royalties distributed to local government agencies in the economic study area for fiscal year 2001 were $6.04 million.[4]

4.4 Other Tax Revenue Sources

Other tax revenue sources that may be impacted by management actions associated with BLM lands include lodging taxes, sales and use taxes and gas taxes. Annual receipts from these three taxes for counties in the economic study area are summarized below.

Table 4-8 indicates lodging taxes ranged from $0.93 to $1.2 million per year between 1999 and 2000 for the economic study area while sales and use taxes generate between $61 and $74 million during this same time as summarized in Table 4-9.

Table 4-8
Lodging Tax Distributions

County	FY 1999	FY 2000	FY 2001
Albany	$176,937	$278,992	$296,795
Carbon	$176,051	$202,998	$197,689
Laramie	$333,245	$379,875	$408,164
Sweetwater	$247,099	$270,368	$307,111
Total	**$933,332**	**$1,132,233**	**$1,209,759**

Source: Wyoming Department Revenue Annual Report - FY 2001

3 *W.S. 9-4-601*.

4 *Annual Report of the Treasurer of the State of Wyoming, June 30, 2001.*

Table 4-9
Sales and Use Tax Distributions, 2000

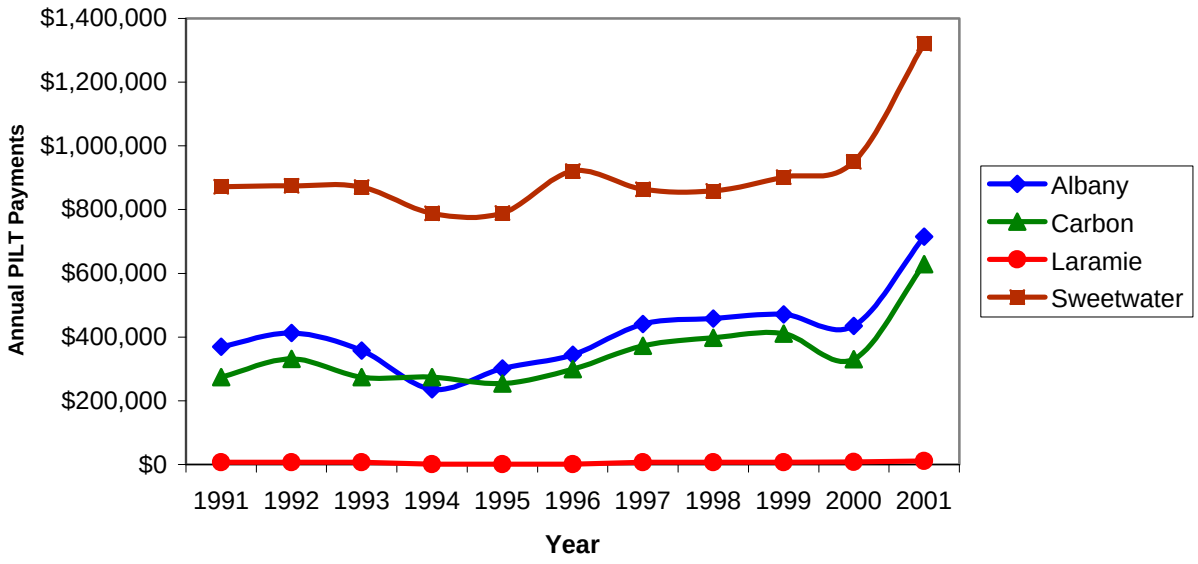
Jurisdiction	FY 1999	FY 2000	FY 2001
Albany[a]	$11,184,686	$12,638,203	$12,638,203
Carbon[a]	$8,127,805	$10,151,339	$10,151,399
Laramie[a]	$22,630,054	$29,173,211	$29,173,211
Sweetwater[a]	$19,190,295	$22,413,185	$22,413,185
Total	**$61,132,840**	**$74,375,938**	**$74,375,998**

Source: Wyoming Department Revenue Annual Report - FY 2001
[a] Includes distribution to county and cities and town within each county.

4.5 Payment in Lieu of Taxes (PILT)

Each of the counties in the study area receive Payments in Lieu of Taxes (PILT) to compensate local governments for hardships caused by Federal lands being exempt from local property taxes. PILT payments are allowed in addition to other revenue sharing programs such as Federal Mineral Royalties and U.S. Forest Reserve payments. The PILT payment made to each county is based on a complex formula that takes into account revenue sharing from the previous year, county population, and acreage of the county in Federal ownership. PILT payments received by the counties in the economic study area for the last ten years are summarized in Figure 4-3.

Figure 4-3
Annual PILT Payments
1991-2000



5.0 Economic Activities Attributable to BLM Lands within the Rawlins Field Office

Activities on BLM lands can provide important economic stimulus to local economies. For the Rawlins Field Office, activities such as oil and gas and coal production, grazing and recreation are important to the region. The following section discusses the link between activities on lands within the Rawlins RMPPA and the local economy.

Oil and Gas Operations

Historical oil and gas production data between 1974 and 2000 were used to estimate annual production for the Rawlins Field Office as is summarized in Figures 5-1 and 5-2. This area continues to be a very important area in terms of oil and gas production as is apparent by the two figures. For instance, Sweetwater County had the third highest taxable valuation of crude oil and natural gas of counties throughout Wyoming during 2001. Much of this production occurred on BLM controlled acreage**.**

While mining employment and income have declined in the region in recent years, it still remains a strong industry within the study area. This is especially true for western portions of the study area that are more dependent on mining than the eastern counties.

Figure 5-1
Historic Gas Production
Rawlins Field Office

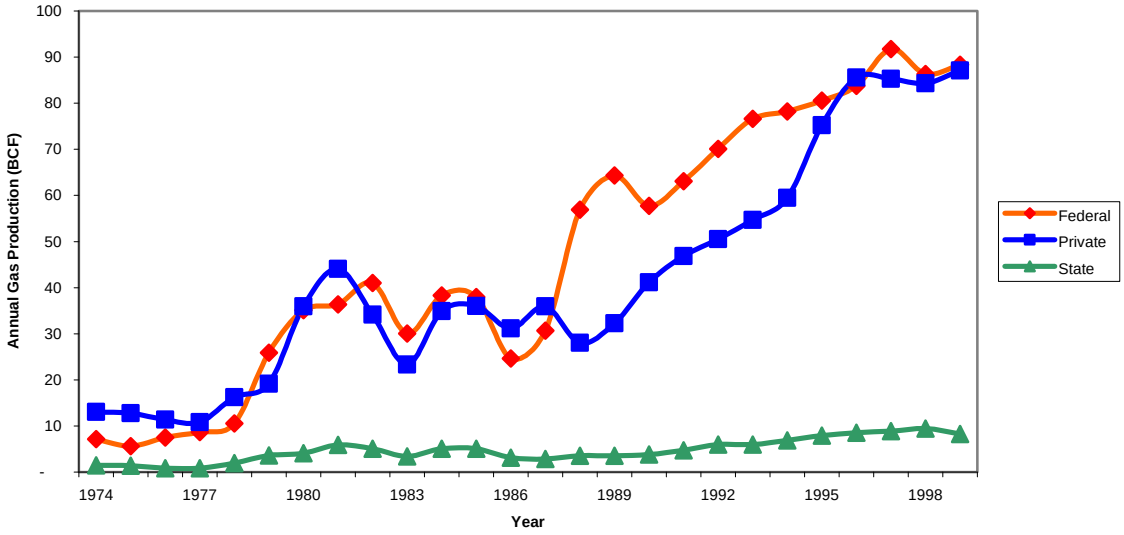
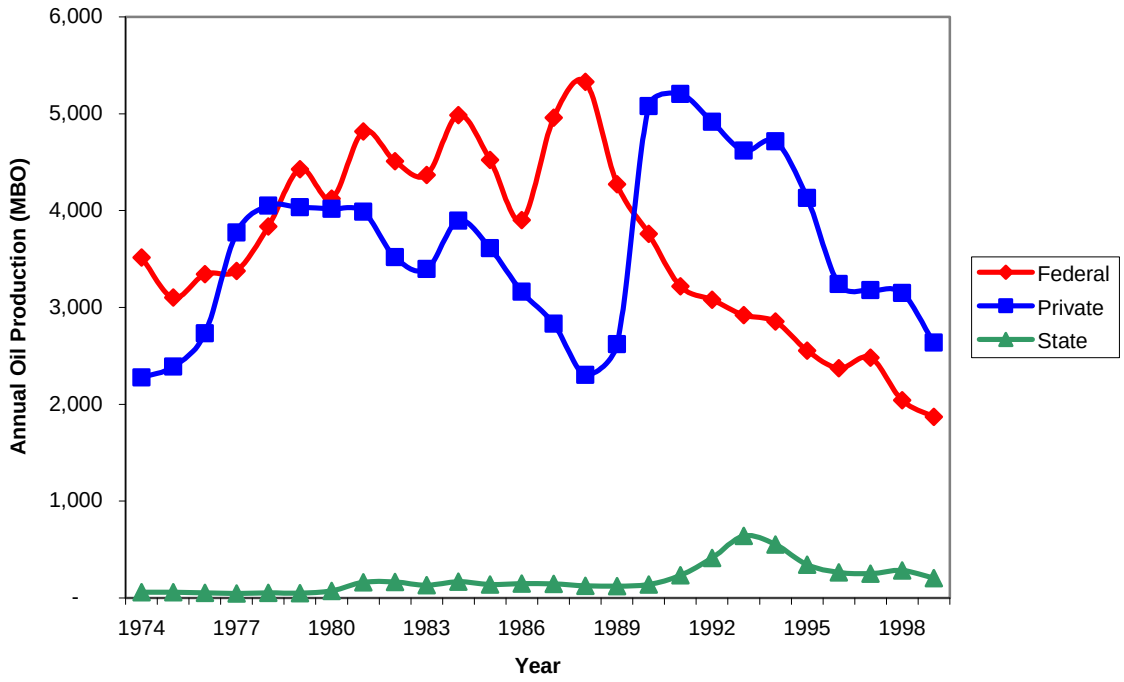


Figure 5-2
Historic Oil Production
Rawlins Field Office



Annual production data was used in combination with the average taxable valuation per unit and average tax and royalty rates to estimate ad valorem taxes (county), severance taxes (State) and Federal royalties from production on BLM lands within the Rawlins Field Office for year 2000. These estimates are illustrated in Tables 5-1 through 5-3. For the purpose of this analysis, actual production was obtained from the Wyoming Geologic Survey and used in combination with the average taxable valuation per unit and average tax and royalty rates to estimate ad valorem taxes (county), severance taxes (state) and federal royalties. And from this analysis, oil and gas production occurring within the planning area generated an estimated $55 million in mineral tax revenues to the county, state and federal government during fiscal year 2001.

Tax revenues associated with coal production on BLM lands within the Rawlins Field Office are also included in Tables 5-1 through 5-3. Coal production resulted in an estimated $3.2 million in tax revenues to state and local government entities and over $3 million to the federal government.

Table 5-1
Estimated Ad Valorem Tax - Production - Rawlins Field Office (Federal Lands)

Product	Total Annual Production	Taxable Valuation Per Unit[a]	Assessed Valuation	Average Tax Levy[a]	Total Estimated Ad Valorem
(1)	(2)	(3)	(4) = (2)*(3)	(5)	(6) = (4)/1000*(5)
Oil (BBLs)	1,557,123	$24.47	$38,102,800	58.849	$2,242,312
Natural Gas (MCF)	81,540,962	$2.60	$212,006,501	58.849	$12,476,371
Coal (Underground)	1,409,233	$16.62	$23,421,452	61.935	$1,450,608
Coal (Surface)	705,958	$3.91	$2,760,296	61.935	$170,959
Total			**$276,291,049**		**$16,340,249**

[a] Source: Wyoming Department of Revenue Annual Report - Fiscal Year 2001, Cheyenne, WY.

[b] Source: Wyoming Taxpayers Association, "Wyoming Property Taxation 2001, Cheyenne, WY.

Table 5-2
Estimated Severance Tax - Production - Rawlins Field Office (Federal Lands)

Product	Total Annual Production (BBLs/MCF)	Taxable Valuation Per Unit[a]	Assessed Valuation	Average Sev. Tax Per Unit of Production[a]	Total Estimated Severance Tax
(1)	(2)	(3)	(4) = (2)*(3)	(5)	(6) = (4)*(5)
Oil	1,557,123	$24.47	$38,102,800	0.060	$2,286,168
Natural Gas	81,540,962	$2.60	$212,006,501	0.060	$12,720,390
Coal (Underground)	1,409,233	$16.62	$23,421,452	0.070	$1,639,502
Coal (Surface)	705,958	$3.91	$2,760,296	0.0375	$103,511
Total			**$276,291,049**		**$16,749,571**

[a] Source: Wyoming Department of Revenue Annual Report - Fiscal Year 2001, Cheyenne, WY.

Table 5-3
Estimated Federal Royalties - Production - Rawlins Field Office (Federal Lands)

Product	Total Annual Production (BBLs/MCF)	Taxable Valuation Per Unit[a,b]	Assessed Valuation	Federal Royalty Rate	Total Estimated Federal Royalties
(1)	(2)	(3)	(4) = (2)*(3)	(5)	(6) = (4)*(5)
Oil	1,557,123	$22.92	$35,687,082	0.125	$4,460,885
Natural Gas	81,540,962	$2.10	$171,619,263	0.125	$21,452,408
Coal (Underground)	1,409,233	$16.62	$23,421,452	0.125	$2,927,681
Coal (Surface)	705,958	$3.91	$2,760,296	0.125	$345,037
Total			**$207,306,345**		**$29,186,011**

[a] Source: Wyoming Department of Revenue Annual Report - Fiscal Year 2001, Cheyenne, WY.

[b] The taxable valuation for oil and gas was decreased to account for allowable cost deductions taken by operators prior to paying federal royalties. Therefore, the taxable valuation per barrel of oil is 93.66% of total valuation and 80.95% of total value

Grazing

Grazing is another important use of BLM lands within the Rawlins Field Office. To understand the economic importance of grazing, the percentage of agricultural sales in the four-county study area attributable to grazing within the Rawlins Field Office was estimated using data and information from BLM, the Wyoming Statistical Service and the National Agriculture Statistical Service.

The value of grazing AUMs for cattle and sheep were estimated as summarized in Tables 5-4 and 5-5. For cattle AUMS, data was obtained from the Wyoming Agricultural Statistical Service as shown in columns 2 and 3 and include the value of cattle sold in Wyoming for 1997. Total cattle sales were divided by the number of cows that had calved, which provided a value per cow sold as summarized in column 4. The value per cow was then divided by an AUM conversion factor resulting in an estimated value per AUM for 1997. A similar method was used to value sheep AUMS as summarized in Table 5-5.

Table 5-4
Estimated Value of Cattle AUMs

Year	Value of Production (1,000$s)[a]	Cows that have Calved (1,000 Head)[a]	Value Per Cow	AUM Conversion (AUMs/cow)[b]	Value of Production Per AUM (Nominal $)
(1)	(2)	(3)	(4)	(5)	(6)
1997	$442,717	870	$508.87	16	$31.80

[a] Wyoming Agricultural Statistics

[b] J.P. Workman, *Range Economics*, 1986, McMillian Publishing, Inc. New York, New York.

Table 5-5
Value of Sheep AUMS

Year	Value of Production (Sheep and Lambs) (1,000$)	Value of Wool Production (1,000$)	Total Value of Production	Ewes 1 Year and Older (1,000 Head)	Value Per Ewe	Conversion to AUMs (AUMs/Ewe)	Value of Production Per AUM Nominal $
1997	$33,935	$5,576	$39,511	450	$87.80	3.2	$27.44

[a] Wyoming Agricultural Statistics

[b] J.P. Workman, *Range Economics*, 1986, McMillian Publishing, Inc. New York, New York.

Using the value per cattle and sheep AUM calculated above, livestock sales attributable to grazing on BLM lands during 1997 was estimated to be over $10 million per year as summarized in Table 5-6. Comparing total agricultural sales in the four-county study area with the estimated value of grazing within the Rawlins Field Office indicates that grazing activities accounted for 14 percent of cattle and calf sales and 7 percent of all agricultural sales for this area as summarized in Table 5-7.

Table 5-6
Estimated Value of Grazing Activities on BLM Lands within the Rawlins Field Office for 1997

Total Cattle AUMs Attributable to Grazing within Rawlins Field Office - 1997	Total Sheep AUMs Attributable to Grazing within Rawlins Field Office – 1997	Value of Cattle Grazing ($1,000)[a]	Value of Sheep Grazing ($1,000)[b]	Total Value of Grazing on BLM Lands ($1,000)
309,725	30,977	$9,851	$850	$10,701

[a] Cattle Grazing was valued per AUM at $31.80/AUM based on data from the Wyoming Agriculture Statistical Service

[a] Sheep Grazing was valued per AUM at $27.44/AUM based on data from the Wyoming Agriculture Statistical Service

Table 5-7
Percentage of Agricultural Sales in Study Area Attributed to Grazing on BLM Lands in Rawlins Field Office for 1997

Total Agricultural Sales - Study Area (1,000$)	Total Cattle and Calf Sales Study Area (1,000$)	Estimated Value of Grazing on BLM Lands - Rawlins Field Office (1,000$)	Percentage of Total Cattle and Calf Sales (1,000$)	Percentage of Total Agricultural Sales (1,000$)
$153,329	$76,353	$10,701	14.0%	7.0%

Source: U.S. Department of Agriculture, National Agriculture Statistical Service, *Census of Agriculture, 1997.*

Recreation

Recreational activity has important economic value both in terms of satisfaction provided to local residents and the economic activity generated for the regional economy. In terms of economic activity, recreation generates additional spending in the local economy that supports jobs and income. Estimates of recreational use within the Rawlins Field Office indicate that over several hundred thousand Recreational Visitors Days are spent in this

area. As visitors come to this area to recreate they spend money on goods and services to support their activities such as lodging, eating and drinking, gasoline and other items. These expenditures can be an important economic stimulus to the local area. Thus, outdoor recreation in general is important to the region both in terms of satisfaction to residents and economic stimulus for the regional economy.

6.0 Social Characteristics

The social characteristics throughout the Rawlins Field Office are similar to other small rural western communities. These areas are strongly tied to traditional natural resource base industries such as agriculture and extractive industries. However, for this area the tie to public lands appears to be stronger in the western counties compared to the eastern counties. Albany and Laramie Counties, with the presence of Cheyenne and Laramie, have a more diverse economic base and are not as reliant on public lands.

Public lands are recognized for not only providing an important natural resource base for economic activities but they support a particular way of life. Public lands also provide scenic beauty, wildlife habitat and world-class recreational opportunities. Because public lands comprise up to 50 percent of the land area within counties in the economic study area, management decisions can affect not only the economic base of local communities but the lifestyles on which these local communities are tied.

Agriculture has provided the historical basis for community development for much of the nineteenth century and ranching and grazing are viewed as a viable economic activity that provides for open space, protection of natural resources, and support of cultural and ecological diversity. For instance, though agricultural activities have fallen in economic importance in recent years in the economic study area, this industry is very important for its historic and cultural influences. Moreover, agricultural is viewed as a guardian of resources and an underpinning of cultural resources throughout the Rawlins Field Office. Because the management decisions of the Rawlins Field Office affect ranching operations beyond public land boundaries, communities are concerned about the social influences these decisions can have on local communities.

The oil and gas and coal industries have also played a vital role in the social character of the economic study area. These industries have been an important part of the tax base for two of the four counties in the study area for many years. The area has experienced several boom and bust cycles throughout its history and is now experiencing a decline in population as some of the operations, especially coal reach the end of their life and are closing. However, individuals involved with extractive industries remain active members

of local communities and are directly affected by management decisions made by the Rawlins Field Office.

In spite of the traditional social characteristics throughout the Rawlins RMPPA, there are indications that these views and beliefs are changing somewhat. Some parts of the economic study area have seen an increase in population. The population increases are in part due to the attraction of this region for the abundant and high quality air, water and land resources that offer a rich quality of life and a western wilderness heritage. This new population is not tied to traditional natural resource industries and may support a more conservation orientation for public land management.

7.0 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations, requires identifying and addressing disproportionately high and adverse human health and environmental effects of Federal programs, policies and activities on minority and low-income populations.

Relevant census data for counties within the study area were collected to determine whether the populations residing within the four study area counties constitute an "environmental justice population" by meeting either of the following criteria.

- At least one-half of the population is of minority or low-income status
- The percentage of population of minority or low-income status is at least 10 percentage points higher than for the entire State of Wyoming.

The population distribution by race is summarized in Table 7-1 for all counties in the study area. In addition, Figure 7-1 shows the minority population for each county in the state of Wyoming where minority population is calculated as total population less non-Hispanic white. All four counties show minority populations that are greater than the state average. This is mainly attributable to the higher Hispanic population that lives in these four counties than in the rest of the state. Laramie County also has a slightly higher Black or African American population than the rest of the state, which is likely due to opportunities associated with the University of Wyoming and F.E. Warren Air Force Base.

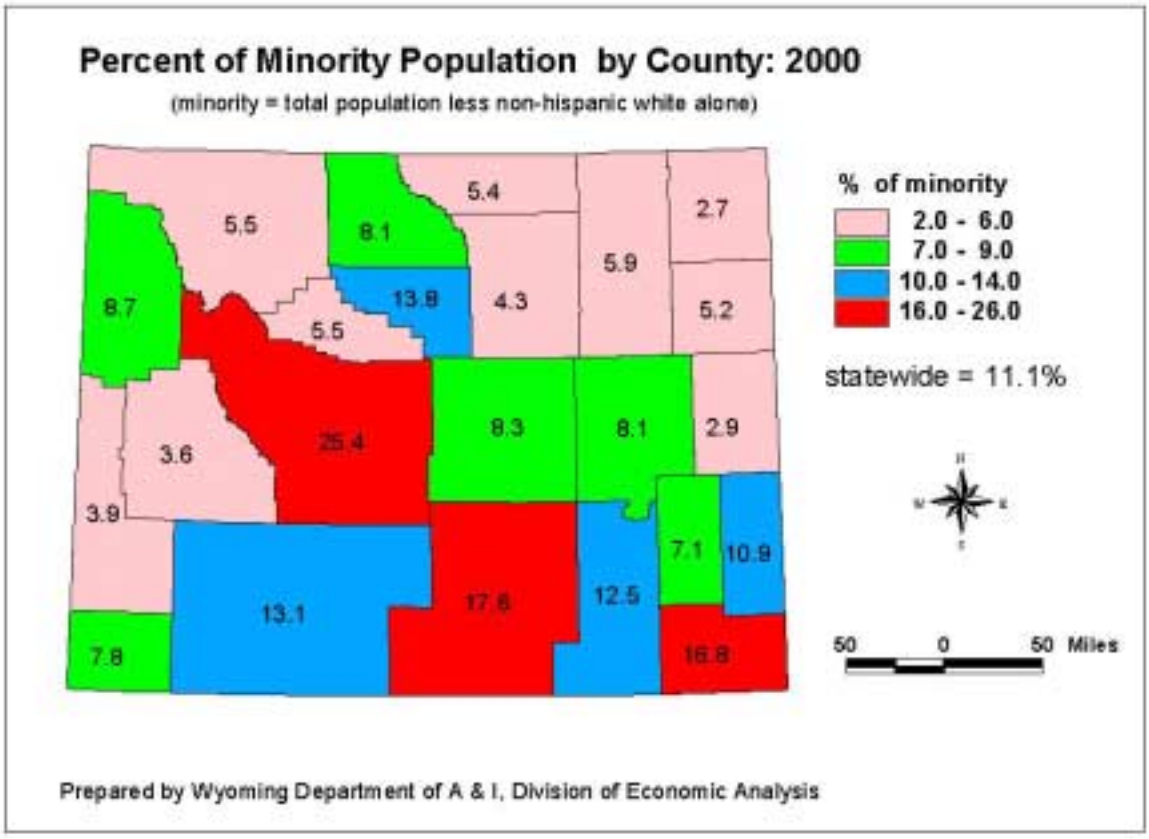
Table 7-1
Population Distribution (Percentage) by Race and Hispanic by County: 2000

County	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races	Hispanic or Latino (of any race)
Albany	91.3	1.1	1.0	1.7	0.1	2.6	2.2	7.5
Carbon	90.1	0.7	1.3	0.7	0.1	5.2	2.1	13.8
Laramie	88.9	2.6	0.8	1.0	0.1	4.0	2.6	10.9
Sweetwater	91.6	0.7	1	0.6	0.0	3.6	2.4	9.4
Wyoming	92.1	0.8	2.3	0.6	0.1	2.5	1.8	6.4

Source: U.S. Bureau of Census

Percentages may not add to 100 because of individuals may report ethnicity under more than one category.

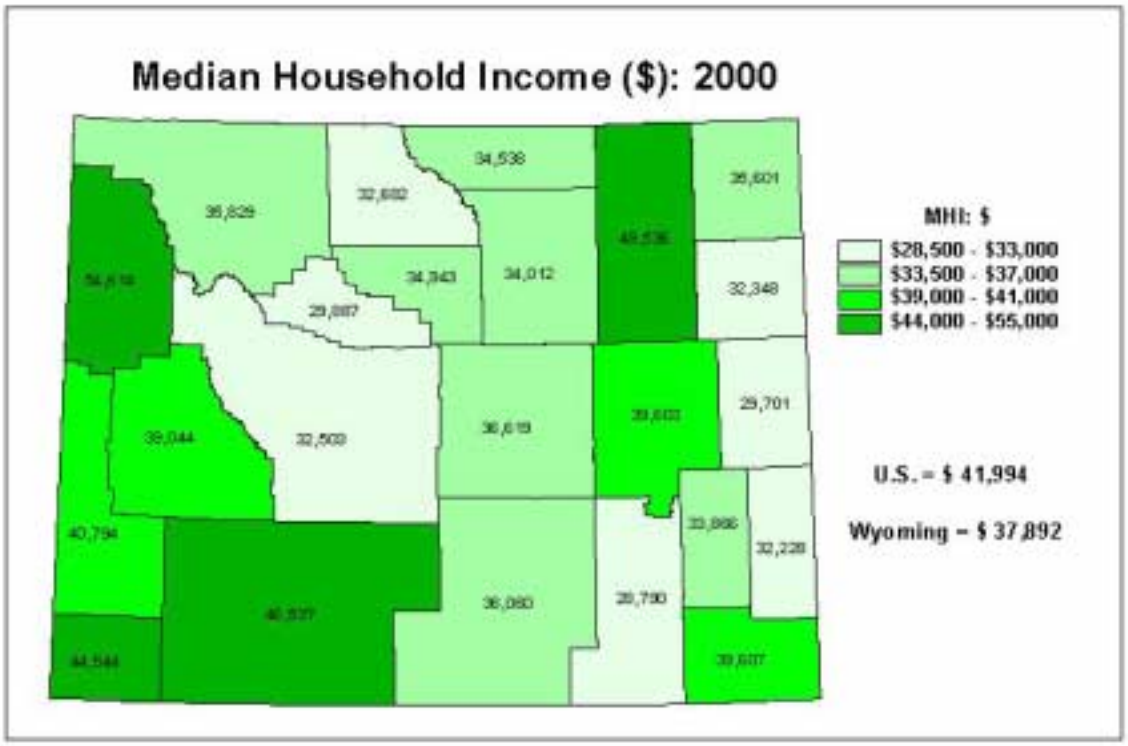
Figure 7-1

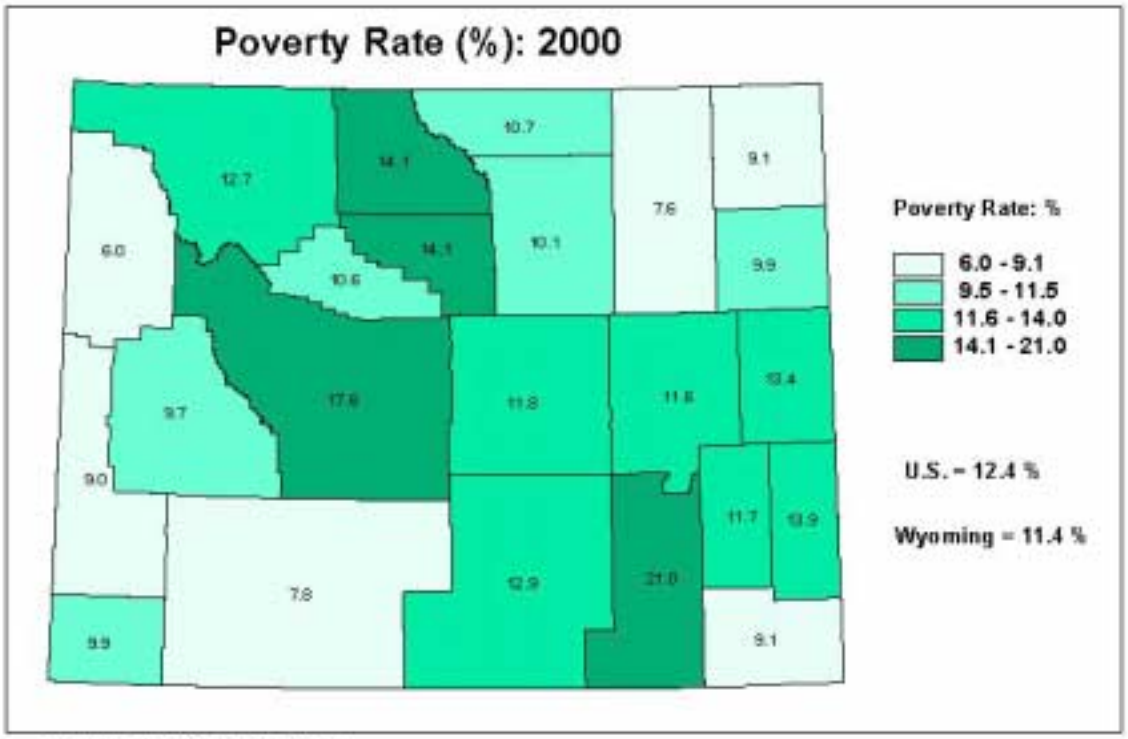


Even with the greater percentage of minority populations living in the four county study area, this does not constitute an "environmental justice population" because it does not meet one of the two four criteria listed above.

Figure 7-2 summarizes the median household income and poverty rates for each county in Wyoming for 2000. This figure shows that the median household income in Laramie and Sweetwater counties are above the state average while poverty levels are lower than poverty levels throughout the state. This indicates the absence of low-income populations within these two counties that could be impacted by BLM actions. However, this is not the case in Carbon and Albany counties, which reported a lower median household income and higher poverty rates than throughout Wyoming. For Albany County, the poverty rate is ten percentage points above the state average indicating the potential for a low-income "environmental justice population". This will need further analysis to determine if low-income populations may be impacted by BLM management actions.

Figure 7-2





Source: U.S. Census Bureau

Prepared by Wyoming Economic Analysis Division